

# Nicholas Zuber

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## SKILLS

### Programming Languages & Frameworks

*Proficient in:* JavaScript, NodeJS, React/Redux, React Native, C++, HTML5, CSS3, jQuery  
*Experienced with:* Python, C, PHP, Java, MySQL, MIPS Assembly, Shell Script  
*Software & OS:* Git, OS X, Windows, Ubuntu, Visual Studio, VIM, Bash, WordPress, Magento

## EDUCATION

### University of Massachusetts Lowell

*Fall 2014 – Spring 2018*

*Bachelor of Science in Computer Science, Minor in Mathematics*

*Relevant Courses:* Data Structures, Algorithms Analysis, Object Oriented Design, Functional Programming, Discrete Mathematics, Operating Systems, Computer Architecture & Assembly, Probability and Statistics, Logic Design  
*Honors:* Dean's List, UMass Amherst Book Award for Computer Science

*Activities:* Member of Modern JavaScript Society, Member of Hackathon Hackers, Captain of Intramural Soccer Team

## EXPERIENCE

### Robin

*Software Engineer Intern*

*May 2016 – August 2016*

*Tech Stack:* JavaScript, React Native, Redux, Git

- Helped build and maintain a newly made mobile application for Android and iOS platforms for thousands of users
- Utilized knowledge of Levenshtein string distance algorithm to build custom approximate string matching module derived from the Wagner-Fischer approach with memory efficient alterations, to enhance user experience in search fields
- Carefully applied functional paradigms to take full advantage of Redux and to produce testable, deterministic code that emulates a deterministic finite state machine

### Veranda Outdoors

*May 2015 – August 2015*

*Software Developer*

*Tech Stack:* PHP, MySQL, JavaScript, HTML, CSS3, Magento, Apache4

- Created a practical and user friendly whole sale ordering platform for hundreds of relatively high profile customers of the company
- Quickly was able to adapt to the preexisting legacy software within the company as well as seamlessly introducing modern software into the ecommerce platform
- Directed and worked with a small team of developers to organize and plan out approaches to tackle various projects efficiently
- Guided design improvements on the main website, as well as other areas of the website to improve the user experience

### University of Massachusetts

*February 2015 – June 2015*

*Web Designer/Software Developer*

*Tech Stack:* JavaScript, HTML5, CSS3, jQuery

- Combined knowledge of data structures and divide and conquer algorithmic techniques to create an optimized class scheduling application that is aimed to be used by hundreds of staff members
- Designed a modern and clean user interface for a simple and easy-to-use experience, while still maintaining powerful functionality
- Communicated and worked together proficiently with staff to build and design the ideal web application to fit their needs and help automate the class scheduling process

## PROJECTS

### Needle (Library)

*September 2015 – Present*

*Software Engineer*

*Tech Stack:* JavaScript, NodeJS

- Worked intimately with a wide variety of commonly used data structures (linked lists, hash maps, k-ary trees, etc.), as well as more esoteric, but useful, data structures (rolling hash, bit array, etc.)
- Produced a series of benchmarks to analyze the performance of individual components throughout the library and various flavors of unit testing for quality assurance
- Optimized software performance, as well as adding both client and server side support to produce a flexible, lightweight product

### MarkUp (WebApp)

*August 2016 – Present*

*Software Engineer*

*Tech Stack:* JavaScript, React, Redux, NodeJS

- Developed and designed an online markdown platform that supports Kramdown and MathJax, allowing for simple and easy text editing for rich markdown applications
- Implemented a deterministic and stateful application that predictably adheres to the functional paradigm that Redux applications warrant
- Capitalized on the use of React's virtual DOM approach to provide a smooth and performant product that can handle continuous state changes and alterations
- Created an intuitive and modern user interface that abides by an internal style guide with carefully coordinated color schemes and strategically placed interactive components

### Material Paper (React Module)

*August 2016 – Present*

*Software Engineer*

*Tech Stack:* JavaScript, React, NodeJS

- Built a malleable, versatile, and responsive component that is designed to seamlessly integrate into any React application
- Analyzed the Material Design specifications to produce a meaningful and natural feeling module that bolsters user experience
- Designed the ability to create easily reusable settings and customizations so component variations can be painlessly distributed throughout an application

References available upon request